

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Please cancel claims 1-27.

28. (original) A cryo-therapy device, comprising:  
a shaft having a proximal end and a distal end;  
a cooling chamber disposed at the distal end of the shaft and comprising an inner member;  
a coolant intake tube disposed within the shaft, the coolant intake tube having a distal opening in fluid communication with the inner member of the cooling chamber, and  
an exhaust tube disposed within the shaft, the exhaust tube having a distal opening in fluid communication with the inner member of the cooling chamber.
29. (cancelled)
30. (original) The device in accordance with claim 29, wherein the shaft further comprises an inflation lumen in fluid communication with the balloon.
31. (original) The device in accordance with claim 28, further comprising an outer sheath disposed over at least a portion of the shaft that defines a vacuum lumen therebetween.
32. (original) The device in accordance with claim 28, further comprising one or more thermal-resistive sensors disposed proximate the inner member.

Claims 33 – 35 (cancelled)

36. (original) The device in accordance with claim 32, further comprising an outer sheath disposed over at least a portion of the shaft that defines a vacuum lumen therebetween.

37. (original) The device in accordance with claim 32, further comprising one or more thermal-resistive sensors disposed proximate the cooling member.

38. (original) A method of causing cold-induced necrosis, comprising the steps of:  
providing a catheter including a shaft having a proximal end, a distal end, and a guidewire lumen extending at least partially therethrough; a cooling chamber disposed at the distal end of the shaft; a coolant intake tube disposed within the shaft, the coolant intake tube having a distal opening in fluid communication with the cooling chamber; and an exhaust tube disposed within the shaft, the exhaust tube having a distal opening in fluid communication with the cooling chamber;

advancing the catheter across a lesion; and  
delivering coolant through the coolant intake tube to the cooling chamber to cool the lesion.

39. (original) The method in accordance with claim 38, further comprising the step of draining coolant from the cooling chamber through the exhaust tube.

40. (original) The method in accordance with claim 38, wherein the step of delivering coolant through the coolant intake tube to the cooling chamber cool the lesion decreases the temperature of the cooling chamber within the range of about -40°C to about 20°C.

41. (original) The method in accordance with claim 38, further comprising the step of freezing a portion of the lesion.

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42-53. (cancelled)